

# 图计算库

一些统计

[http://blog.sina.com.cn/s/blog\\_72ef7bea0102v5ae.html](http://blog.sina.com.cn/s/blog_72ef7bea0102v5ae.html)

## 1. Igraph

网址: <http://igraph.org/>

Github: <https://github.com/igraph>

描述: graph is a collection of network analysis tools with the emphasis on efficiency, portability and ease of use. igraph is open source and free. igraph can be programmed in R, Python and C/C++.

语言: R, C, Python

## 2. NetworkX

网址: <https://networkx.github.io/>

Github: <https://github.com/networkx>

描述: NetworkX is a Python package for the creation, manipulation, and study of the structure, dynamics, and functions of complex networks.

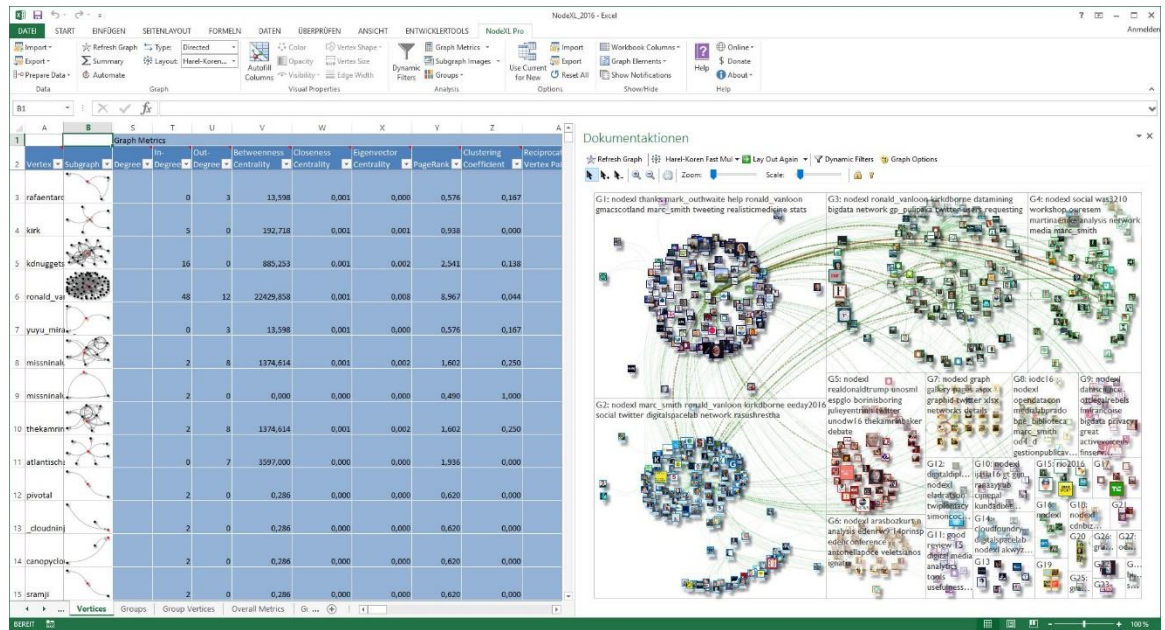
语言: Python

## 3. NodeXL

网址: <https://www.smrfoundation.org/nodexl/>

描述: NodeXL Basic and NodeXL Pro are add-ins for Microsoft® Excel® (2007, 2010, 2013, 2016) that support social network and content analysis.

语言: Excel



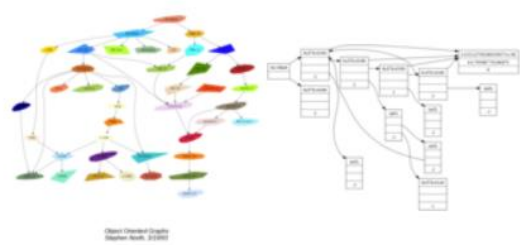
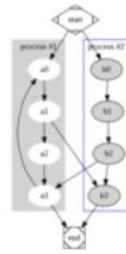
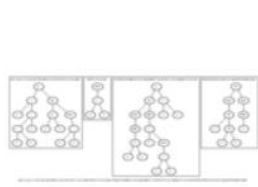
#### 4. Graphviz

网址: <https://www.graphviz.org/>

Github: <https://gitlab.com/graphviz> ,  
<https://github.com/ellson/MOTHBALLED-graphviz>

描述: graph visualization software

语言: DOT, C

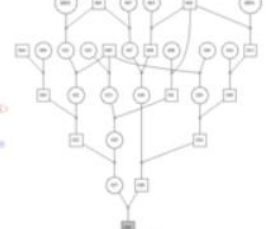
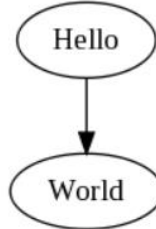


**Genetic Programming**

**cluster**

**crazy**

**datastruct**

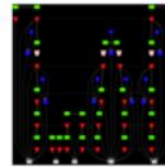
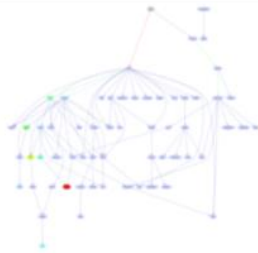


**fsm**

**hello**

**kennedyanc**

**lion\_share**

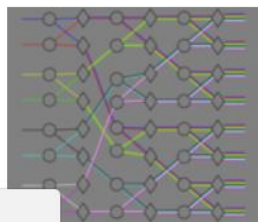


**profile**

**psg**

**sdh**

**siblings**



## 5. The Boost Graph Library (BGL)

网址: [https://www.boost.org/doc/libs/1\\_42\\_0/libs/graph/doc/index.html](https://www.boost.org/doc/libs/1_42_0/libs/graph/doc/index.html)

Github: <https://github.com/boostorg/graph>

描述: A generic interface for traversing graphs, using C++ templates.

语言: C++

## 6. QuickGraph

网址: <http://yacconstructor.github.io/QuickGraph/>

Github: <https://github.com/YaccConstructor/QuickGraph>

描述: Generic Graph Data Structures and Algorithms for .NET

语言: C#

## 7. networkD3

网址: <http://christophergandrud.github.io/networkD3/>

Github: <https://github.com/christophergandrud/networkD3>

描述: D3 JavaScript Network Graphs from R

语言: R

## 8. Cytoscape

网址: <http://www.cytoscape.org/>

[http://apps.cytoscape.org/apps/with\\_tag/graphanalysis](http://apps.cytoscape.org/apps/with_tag/graphanalysis)

Github: <https://github.com/christophergandrud/networkD3>

描述: Cytoscape is an open source software platform for visualizing complex networks and integrating these with any type of attribute data

The screenshot displays the Cytoscape App Store interface. At the top, there's a navigation bar with the Cytoscape logo, 'Submit an App', a search bar, and a 'Sign In' button. The main content area is divided into a left sidebar and a main panel. The sidebar, titled 'All Apps', lists various categories: collections, data visualization, network generation, graph analysis (highlighted), network analysis, online data import, integrated analysis, clustering, systems biology, utility, data integration, enrichment analysis, visualization, layout, automation, core app, network comparison, ontology analysis, import, and pathway database. The main panel is titled 'Graph analysis' and features a search bar, a link to ask a question, and a 'Sort by' dropdown menu with options: name, downloads, votes, and newest release. Below this, a grid of application cards is shown, each with an icon, title, description, and a star rating. The applications listed are: CentiScaPe (Find the most important nodes in a network, calculating centrality parameters for each node), ClusterONE (Finds overlapping protein complexes in a protein interaction), CountTriplets (Counts graph triplets and plots significance profiles), CycleDetector (Detects Cycles in a Cytoscape network), CytoCluster (a Cytoscape app for analysis and visualization of clusters from), CytoCopteR (A Cytoscape plug-in for training logic models), cytoHubba (Predicts and explores important), and CytoMOBAS (Identifies and analyzes disease).

## 9. Neo4j

网址: <https://neo4j.com/graph-analytics/>

Github: <https://github.com/christophergandrud/networkD3>

描述: Cytoscape is an open source software platform for visualizing complex networks and integrating these with any type of attribute data

语言:

## 10. Pajek

网址: <http://mrvar.fdv.uni-lj.si/pajek/>

Github:

描述: Cytoscape is an open source software platform for visualizing complex networks and integrating these with any type of attribute data

语言:

## 11. UCINET

网址: <http://mrvar.fdv.uni-lj.si/pajek/>

Github: 描述: UCINET 6 for Windows is a software package for the analysis of social network data. It was developed by Lin Freeman, Martin Everett and Steve Borgatti. It comes with the NetDraw network visualization tool.

语言:

## 12. blueprints

网址: <http://tinkerpop.apache.org/>

Github: <https://github.com/tinkerpop/blueprints>

描述: A Property Graph Model Interface

语言:

## 13. JUNG

网址: <http://jung.sourceforge.net/>

Github: <https://github.com/jrtom/jung>

描述: JUNG — the Java Universal Network/Graph Framework—is a software library that provides a common and extendible language for the modeling, analysis, and visualization of data that can be represented as a graph or network. It is written in Java, which allows JUNG-based applications to make use of the extensive built-in capabilities of the Java API, as well as those of other existing third-party Java libraries.

语言: Java

#### 14. sonia

网址: <https://web.stanford.edu/group/sonia/>

Github: <https://github.com/jrtom/jung>

描述: SoNIA is a Java-based package for **visualizing dynamic or longitudinal "network" data**. By dynamic, we mean that in addition to information about the relations (ties) between various entities (actors, nodes) there is also information about when these relations occur, or at least the relative order in which they occur.

语言: Java

#### 15. JSNetworkX

网址: <http://jsnetworkx.org/>

Github: <https://github.com/fkling/JSNetworkX>

描述: A JavaScript port of the NetworkX graph library.

语言: JS

